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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/557,826

11/23/2005

Georg Rasch

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EXAMINER

CHEN, YUAN L

ART UNIT

PAPER NUMBER

4193

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/557,826	Applicant(s) RASCH ET AL.	
	Examiner YUAN L. CHEN	Art Unit 4193	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11/23/2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11/23/2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>7/24/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the distance between the boundary surface and the connecting point as well as the maximum stroke of the piston must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

3. The abstract of the disclosure is objected to because it is not limited to a single paragraph on a separate sheet within the range of 50 to 150 words. Correction is required. See MPEP § 608.01(b).

4. The disclosure is objected to because of the following informalities: "the boundary layer" in paragraph 10 is inconsistent with "the boundary surface" used in other paragraphs, and "acentral" in line 2 page 4 is not a dictionary word.

Appropriate correction is required.

Claim Objections

5. Claims 1 and 4 are objected to because of the following informalities: improper phrase "can be" in Claim 1 Line 6 and Claim 4 Line 3 should be replaced by – is --.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and to distinctly claim the subject matter which applicant regards as the invention.

With respect to Claim 1, the word "it" in Line 12 is unclear to represent which subject matter: cylinder, chamber or piston.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1 - 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Achelpohl et al. (US Patent No. 5974968) in view of Swift (US PUB 2003/0145472).

With respect to Claim 1, Fig. 2 of Achelpohl et al. disclose a mandrel unit for a rotary printing machine with

- a mandrel-mounting element (27 called holding head) that forms a hollow body and accommodates in an enclosed form in its interior a bearing (28 called roller bearing) for mounting a print roller mandrel (5 called journal) having a mandrel-supporting surface (5) and that is slid between a mounting position in which the print roller mandrel (5) is in mesh with the bearing (28) and a release position in which the print roller mandrel (5) is out of mesh with the bearing (28),

- a pressurizing medium cylinder (26 called recess bearing guide) comprising a pressure chamber and a piston located inside it for sliding the mandrel-mounting element (27) between the mounting position and release position.

Achelpohl et al. also disclose that there is a break-through that is open in the release position of the mandrel-mounting element so that the printing roller mandrel (5) and the mandrel-locking unit can be separated from one another by a movement in relation to one another (see column 1 lines 39 – 43).

Achelpohl et al. do not disclose that the distance between the boundary surface and contacting point is smaller than the maximum of the stroke of the stroke in the pressurizing medium cylinder and the inner diameter of the pressurizing medium cylinder is larger than the outer diameter of the mandrel-mounting element.

However, Swift discloses in Fig. 9A a shoe and bracket assembly, where the displacement between the shoe (88) with an adjustment slot (100) and the bracket 96 is adjusted by their connecting screw (104).

Therefore it has been obvious to a person of ordinary skill in the art at the time of invention to modify Achelpohl et al.'s mandrel unit by using Swift's assembly; in this modification/combination, the bracket (96) is replaced by piston and the shoe (88) is replaced by the mandrel-mounting element, so that the distance between the boundary surface and contacting point is smaller than the maximum of the stroke of the stroke in the pressurizing medium cylinder and the inner diameter of the pressurizing medium cylinder is larger than the outer diameter of the mandrel-mounting element for the purpose of having a more compact design and a lower overall depth as well as making

an extra space for adjusting the displacement between the piston and the mandrel-mounting element.

This modification/combination meets all the limitation in Claim 1.

With respect to Claims 2 and 3, for the consideration of the modification/combination of Achelpohl et al. and Swift, the distance between the boundary surface and contacting point is smaller than three quarter and half of the maximum of the stroke of the stroke in the pressurizing medium, which meets all the limitation of Claims 2 and 3.

With respect to Claim 4, for the consideration of the modification/combination of Achelpohl et al. and Swift, the parts of the mandrel-mounting element of Achelpohl et al. is displaced in the pressurizing medium cylinder because of the teaching of Swift in Fig. 9A when displacement takes place by adjusting the position of the screw (104) in the slot (100) of the mandrel-mounting unit (88), which meets all the limitation of Claim 4.

With respect to Claim 5, for the consideration of the modification/combination of Achelpohl et al. and Swift, the piston is a disk as taught by Achelpohl in Fig. 2 and is connected to the mandrel-mounting element (88) by the screw (104) as taught by Swift. In this modification/combination the screw (104) replaces the piston rod to receive or transmit motion so that the piston is a disk without a piston rod for the purpose of ensuring a secure and adjustable connection between the piston and the mandrel-mounting element, which meets all the limitation of Claim 5.

With respect to Claim 6, for the modification/consideration of the combination of Achelpohl et al. and Swift, in this modification/combination the connecting point between

the piston (96) and the mandrel-mounting element (88) has a screwed (104) connection as taught by Swift in Fig. 9A for the purpose of ensuring an adjustable connection between the piston and the mandrel-mounting element, which meets all the limitation of Claim 6.

With respect to Claim 7, for the consideration of the modification/combination of Achelpohl et al. and Swift, in this modification/combination the mandrel-mounting element and the pressurizing medium cylinder are shaped as circular cylinders as taught by Achelpohl et al. in Fig. 2 and that their axes of symmetry extend parallel to the distance between one (96) and another (88) as taught by Swift in Fig. 9A. This modification/combination achieves the purpose of moving and merging between the piston (96) and the mandrel-mounting element (88) in the axial direction, which meets all the limitation of Claim 7.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The reference Huebner (US. Patent No. 2460504) discloses the printing cylinder being freed for disconnection and removable endwise of itself from the press through the guide way when the bearing block is shifted out of its cylinder supporting position. The reference Rossini (US Patent No. 5735206) disclosed the deformable mandrels for rotary printing cylinders.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yuan L. Chen whose telephone number is 571-270-

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3799. The examiner can normally be reached on Monday-Friday 7:30 AM to 5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Long Nguyen can be reached on 571-272-1753. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

yc

/DANIEL PAN/
Primary Examiner